



Safety Data Sheet
L-Threonine

Revised: 10/12/2017
 SDS Expiry Date: 09/12/2020

1) IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Chemical name	L-Threonine	EC-No.	200-774-1
CAS #	72-19-5	RTECS#	X08590000

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product uses Laboratory chemicals, Manufacture of substances

1.3. Supplier Information of the Safety Data Sheet

Company	SAM Nutrition	Telephone #	+1 (952) 974-9174
	7500 Flying Cloud Drive, Suite 765	Fax #	+1 (952) 974-8183
	Eden Prairie, MN 55344-3945		
	United States of America	Email	info@samhprp.com

1.4. Emergency Contact Information

Emergency # +1 (952) 974-9174

2) HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Not a hazardous substance or mixture

2.2. Label Elements

None required. Not a hazardous substance or mixture

2.3. Unclassified Hazards/Hazards Not Otherwise Classified

None

3) COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Molecular formula	C ₄ H ₉ NO ₃	Molecular weight	119.12 g/mol
CAS Registry #	72-19-5	GHS-US classification	N/A
Concentration	-	Synonyms	(2S,3R)-2-Amino-3-hydroxybutyric acid

3.2. Mixtures

Not a mixture. Mono-constituent.

4) FIRST-AID MEASURES

4.1. Description of First-Aid Measures

If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact	Wash off with soap and plenty of water.
In case of eye contact	Flush eyes with water as a precaution.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2. Important Symptoms and Effects, Both Acute and Delayed

The most important known symptoms and effects described in the labelling (see section 2.2) and/or in section 11

4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

No data available.

5) FIREFIGHTING MEASURES

5.1. Extinguishing Media

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special Hazards Arising from the Substance or Mixture

Carbon oxides, nitrogen oxides (NO_x)

5.3. Advice for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4. Further information

None

6) ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection see section 8.

6.2. Environmental Precautions

Do not let product enter drains.

6.3. Methods and Material for Containment and Cleaning Up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to Other Sections

For disposal see Section 13.

7) HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2. Conditions for Safe Storage

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Chemical does not contain any substances with occupational exposure limits

8.2. Exposure Controls

Appropriate Engineering Controls

General industrial hygiene practice.

Eye/Face Protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Recommended: Nitrile rubber gloves with minimum layer thickness 0.11mm. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Skin and Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9) PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical state	Solid
Appearance	Crystalline powder
Color	White
Odor	No data available
Odor threshold	No data available
pH	5.0 - 6 at 59.6 g/L @ 25°C
Melting point	256°C
Flash point	No data available
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Explosion limits	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Vapor pressure	No data available
Relative density	No data available
Vapor Density	No data available
Specific gravity / density	No data available
Solubility	59.6 g/L at 20 °C (completely water soluble)
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

9.2. Other Information

No data available

10) STABILITY AND REACTIVITY

10.1. Reactivity

No data available

10.2. Chemical Stability

Stable under recommended storage conditions.

10.3. Conditions to Avoid

No data available

10.4. Incompatible Materials

Strong oxidizing agents

10.5. Hazardous Decomposition Products

No data available

10.6. Hazardous Reactions

No data available

In the event of fire: see section 5

11) TOXICOLOGICAL INFORMATION

11.1. Acute Toxicity

LD50 Intraperitoneal - rat - 3,098 mg/kg

Remarks: Behavioral: Muscle contraction or spasticity. Lungs, Thorax, or Respiration: Dyspnea.

Nutritional and Gross Metabolic Changes: Body temperature decrease.

Inhalation No data available

Eye contact No data available

Skin contact No data available

Ingestion No data available

11.2. Skin Corrosion/Irritation

No data available

11.3. Serious Eye Damage/Irritation

No data available

11.4. Respiratory or Skin Sensitization

No data available

11.5. Germ Cell Mutagenicity

No data available

11.6. Carcinogenicity

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

11.7. Reproductive Toxicity/Teratogenicity

No data available

11.8. Single Target Organ Toxicity – Single Exposure

No data available

11.9. Single Target Organ Toxicity – Repeated Exposure

No data available

11.10. Aspiration Hazard

No data available

11.11. Additional Information

RTECS#: X08590000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12) ECOLOGICAL INFORMATION

12.1. Ecotoxicity

No data available

- 12.2. Persistence and Degradability
No data available
- 12.3. Bio-accumulative Potential
No data available
- 12.4. Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- 12.5. Other Adverse Effects
No data available
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13) DISPOSAL CONSIDERATIONS

- 13.1. Waste treatment methods
Product Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging Dispose of as unused product.
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14) TRANSPORT INFORMATION

- 14.1. Department of Transportation
Not dangerous goods
- 14.2. Transport by Sea
Not dangerous goods
- 14.3. Air Transport
Not dangerous goods
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15) REGULATORY INFORMATION

- 15.1. Safety, Health and Environmental Regulations/ Legislation Specific for the Substance or Mixture

REACH No. A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.

United States SARA 313:
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazard Categories:
No SARA Hazards
Section 302:
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

California Prop. 65 Components:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

US State Right-to-Know Regulations:

L- Threonine; CAS-No. 72-19-5

16) OTHER INFORMATION

16.1. NFPA Rating

Health hazard: 0

Fire Hazard: 0

Reactivity Hazard: 0

16.2. Further Information

The information conveyed in this Safety Data Sheet is only a representation of what SAM HPRP Chemicals, Inc. and doing business as SAM Nutrition has found to be accurate based on the current information that is available in regards to this compound. SAM HPRP Chemicals, Inc. makes no warranty, expressed or implied, with respect to such information, and therefore assumes no liability resulting from product usage. It is strongly recommended that users of this product perform their own investigations to determine the accuracy and suitability of the information for their specific purposes. In no way will SAM HPRP Chemicals, Inc. assume liability for any claims, losses, damages to any third party, any lost profits or any special, indirect, incidental, consequential or exemplary damages that may arise, even if SAM HPRP Chemicals, Inc. has been advised of the possibility of such damages.